

the coxae yellowish, both densely yellowish pollinose and pilose, the hairs of the coxae yellowish white.

Abdomen and genitalia shining yellowish red, segments 1-6 with posterior golden pollinose fasciae, these fasciae entire on segments 1-5 but somewhat narrowed at the middle, the rather numerous hairs yellowish.

Legs light yellowish red, the hairs and bristles golden; claws black, the bases reddish; pulvilli light brown; empodium reddish; middle tibiae with a pair of stout, apical, inwardly directed spines.

Halteres yellowish. Wings yellowish, the costal cell quite densely so, veins golden, brownish apically and posteriorly.

♀. Length 17 mm. Very similar. The third antennal joint missing. The thorax greased, in this condition the median and intermediate spots of the mesonotum plainly black. Segments 1-5 of abdomen with entire posterior pollinose fasciae, segments 6-8 bare of pollen.

Holotype: ♂, Sequoia National Park, CALIFORNIA, Potwisha, elevation 2,000-5,000 feet, VI-20 '29 (E. C. Van Dyke); in the California Academy of Sciences. *Allotype*: ♀, same data, V-28 '29; in the California Academy of Sciences. *Paratype*: ♂ (length 13 mm.), same data, VI-13 '29; in the writer's collection.

Notes on Intermountain Aphids¹

By G. F. KNOWLTON and C. F. SMITH.

The following report deals largely with aphids infesting range and forest plants in Utah and Idaho. Unless otherwise indicated, collections are in Utah and by the writers.

CINARA LASIOCARPAE (G. and P.). On *Abies lasiocarpa*, summit of Logan Canyon, June 10, 1934 (T. O. Thatcher).

C. FORNACULA Hottes. A male, Navajo Lake, Utah, June 16, 1935, appears to be of this species (Det. M. A. Palmer).

C. FERRISI (Swain). A slide, received through the courtesy of Professor M. A. Palmer, was collected by Paul Rice at Moscow, Idaho, July 21, 1931.

¹Contribution from the Entomology Department, Utah Agricultural Experiment Station. Authorized for publication.

C. GLEHNA (Essig). On *Picca pumgens*, River Heights, June 15, 1935 (Thatcher).

PERIPHYLLUS UTAHENSIS (Kult.). On *Salix* at Rexburg, Idaho, June 23, 1935; *Alate vivipara*.—Antennal III, 0.47 to 0.51 mm., with 6 to 11 sensoria; IV, 0.235 to 0.28, with 1 to 4 sensoria; V, 0.17 to 0.22; VI, 0.09 + 0.14 to 0.11 + 0.18 mm. *Apterous vivipara*.—Antennal III, 0.34 to 0.47 mm.; IV, 0.14 to 0.22; V, 0.11 to 0.12; VI, 0.078 + 0.125 to 0.11 + 0.14 mm. Because of the greater relative length of the unguis as compared with the base of antennal VI, the greater development of antennal segments III and IV, and the conspicuous difference in relative lengths of antennals IV and V of alates, the writers consider this material to be *P. utahensis* rather than *P. macrostachyae* (Essig). Also Riverdale and Cleveland, Idaho, September 1, 1935. On *Salix*, Harrisville, June 24, 1935; Hooper, June 3, 1935, in Utah.

P. MACROSTACHYAE (Essig). On *Salix*, Currant Creek, August 16, 1935; Harrisville, June 3, 1935.

PTEROCOMA POPELAE Kalt. On *Populus*, Cowley Canyon, May 16, 1934; Evans, May 13, 1930; Hyde Park; Lark, October 3, 1935; Logan Canyon; Paradise; Salt Lake City, in Utah. Also Rexburg, Idaho, June 23, 1935.

CLAVIGERUS SMITHIAE (Monell). On *Populus*, Grouse Creek, September 28, 1935; Lark, October 3, 1935, in Utah. Also on *Populus* and *Salix* at Rexburg, Idaho, June 23, 1935.

Bipersona hottesi n. sp. *Apterous vivipara*.—Size 2 to 2.5 mm. long; ocular tubercles well developed; antennae pale to dusky; antennal III, 0.82 mm. long, without sensoria; IV, 0.59 to 0.62; V, 0.45 to 0.5; VI, 0.14 + 0.73 to 0.78 mm. long; rostrum exceeding second coxae; rostral IV + V, 0.16 to 0.19 mm. long; hind tibiae 2.25; hind tarsi 0.14; cornicles dark, 0.67 to 0.84; cauda pale to dusky, having a much twisted appearance, hard median portion 0.27 and total length 0.41 mm.

Habitat: Upon wild rose, *Rosa* sp., Big Cottonwood Canyon, Utah, June 29, 1925 (Knowlton). *Type* slide in collection of senior author.

Taxonomy. *Bipersona hottesi* differs from *B. torticauda* (Gill.) in lacking secondary sensoria on antennals III and IV,

in having a shorter rostral IV + V, in possessing blunt to apically enlarged hairs on head and antennae, and in only apical end of hind tibiae being dark.

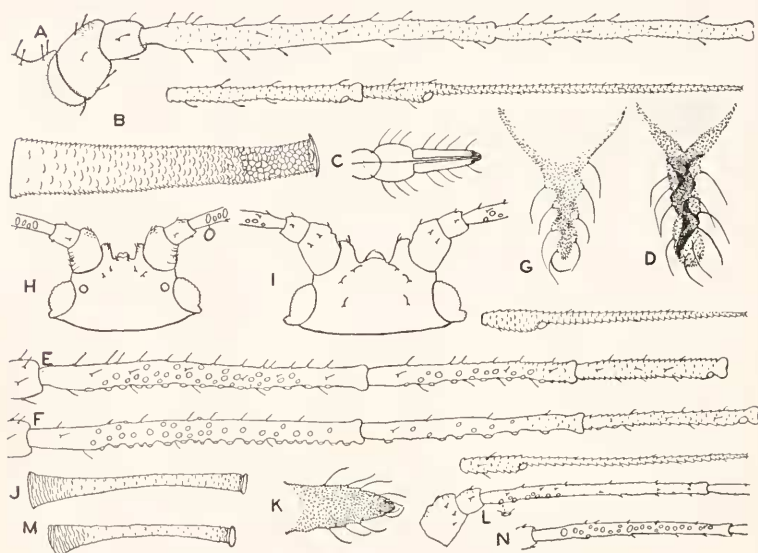


Fig. 1. *Bipersona hottesi* n. sp. Apterous, A to D. *Bipersona torticauda*. Apterous, E, G; alate F. *Macrosiphum zerosalphum*. Apterous, I, J, L; alate H, K, M, N.

B. TORTICAUDA (Gillette). On thistle, Tooele, Utah, June 15, 1915 (C. P. Gillette). The identified slide was secured through the courtesy of Professor M. A. Palmer.

MACROSIPHUM AMBROSIAE (Thos.). On marsh elder, Bozeman and Manhattan, Montana, August 14, 1926 (C. B. Philip). Rexburg, Idaho, June 23, 1935.

M. COWENI (Hunter). In stomach of a lizard, *Sceloporus g. graciosus* at Iosepa, Skull Valley, October 2, 1932; on *Artemisia tridentata*, Ash Creek Canyon, April 25, 1935: Hurricane; Mueller Park; Parley's Canyon, in Utah. Also Winder, June 9, 1935; and Stone, Idaho, May 19, 1930.

M. DIRRHODUM (Walk.). On *Rosa*, Blacksmith Fork Canyon, July 18, 1925; Hooper, June 3, 1935; Logan, October 12, 1929; Lake City, July 28, 1926. Also Bozeman, Montana, August 15, 1926 (Philip).

M. ERIGERONENSIS (Thos.). On *Grindelia squarrosa*, Bozeman, Montana, August 17, 1926 (Philip).

M. PACKI Kuhl. On *Chrysothamnus*, usually *nauscosus*, Beaver, May 3, 1934; Cedar; Cedar City; Clover, October 2, 1932; Glendale, June 27, 1933; Indian Canyon, June 12, 1933; Pintura, May 1, 1934; Riverdale. Also Elk Springs, Colorado, August 18, 1935 (Knowlton).

M. PISI (Kalt.). On alfalfa, Green River, Utah, March 5, 1935. Logandale and Overton, Nevada, April 26, 1935.

M. PSEUDOROSAE Patch. On wild rose, Amalga; City Creek and Emigration Canyons, June 21, 1925; Big Cottonwood Canyon, June 29, 1925; Granite, June 6, 1935; Utah. Also Emigration Canyon, Idaho, June, 1925.

M. ROSAE (L.). On *Rosa*, Mapleton and Provo, Utah, June 7, 1935. Overton, Nevada, April 25, 1935. Puyallup, Washington, August 27, 1932 (A. J. Hanson).

M. SPORADICUM Kuhl. Cedar Valley, on *Chrysothamnus*, June 13, 1935; Dunbar, September 12, 1935.

M. TARAXACI (Kalt.). Mink Creek, Idaho, July 7, 1935, on dandelion. Puyallup, Washington, July 16, 1933 (A. J. Hanson).

M. ZEROZALPIUM Kuhl. This yellowish green aphid occurs upon filaree, *Erodium cicutarium*. Winged and wingless females were collected in Utah at Bountiful, Salt Lake City, and Murray, on May 2, 1927, and at Leeds on April 25, 1935. Wingless viviparae were collected at Brigham and Deweyville, April 28, 1927; at Penrose, June 3, 1930; and at Santa Clara, June 25, 1935.

Neotropical Aeshnas Wanted (Odonata).

The undersigned has well on the way a Synopsis of the Neotropical species of the genera *Aeshna*, *Coryphaeschna* and perhaps some allies, to be illustrated by figures of the genitalia, terminal abdominal structures, patterns of the top of the frons